BAITFISH DEVELOPMENTAL ACTIVITIES IN HAWAII FOR 1975--A PROPOSAL

An expansion of the pole-and-line fishery for skipjack tuna (Katsuwonus pelamis) in Hawaii depends on a total replacement or the supplementing of the present supply of locally available baitfishes. The present supply of nehu (Stolephorus purpureus), the principal baitfish species available in Hawaii, is limited; based on present knowledge a substantial increase in catch on a sustaining basis cannot be expected from this resource. Details of the baitfish problem in Hawaii have been documented elsewhere.

In late 1970 an ad hoc baitfish committee was organized to review and evaluate on-going research on the baitfish problem. The committee is composed of members of the fishing industry (producers and processors in Hawaii), State of Hawaii Fish and Game Division, State of Hawaii Marine Affairs Coordinator, Pacific Island Development Commission/Pacific Tuna Development Foundation, Hawaii Institute of Marine Biology (University of Hawaii), the University of Hawaii Sea Grant Programs and the National Marine Fisheries Service. The committee recently met on April 8 and again on April 24, 1975, to review the status of the baitfish transport project presently conducted by the NMFS Honolulu Laboratory and to discuss future work. At the April 24, 1975 meeting, Mr. Andrew Gerakas as Chairman/President of the PTDF indicated that the Foundation would entertain proposals on baitfish work in Hawaii for financial support.

The following provides details of a proposal to PTDF for support of baitfish work in Hawaii:

SUMMARY

Three recommendations for further baitfish development work emerged from discussions of the ad hoc baitfish committee meetings of April 8 and April 24, 1975. The three projects recommended are:

- 1. Continue work on transporting northern anchovy (Engraulis mordax) via the roll on/off method. Factorial experiments with northern anchovy in San Francisco Bay need to be initiated in order to assess effects of bait quality, oxygen levels, salinity, and handling methods on survival rates. This is to be followed by a trial roll on/off shipment from Oakland, California.
- 2. Transport, via a west coast commercial fishing boat, one large shipment (1,500-3,000 scoops) of northern anchovy for use in fishing tests in Hawaii.
- 3. Provide threadfin shad (<u>Dorosoma petenense</u>) from Wahiawa Reservoir for fishing tests during the 1975 skipjack tuna season.